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(54) Title: USE OF THE PRO-PEPTIDE DOMAIN OF LYSYL OXIDASE AS A THERAPEUTIC AGENT

Human (32) preppaaggawrqqiqwenngqvfsllslgsqyqp (66)

Mouse (26) preppaapgawrqtigwenngqvfsllslgaqyqp (60)

Rat (26) preppaapgawrqtigwenngqvfsllslgaqyqp (60)

SEQ ID NOs.: 3-5

C

Human (84) aqqprtpillirdnrtaaartrtagssgvtagrprpta (121)

Mouse (78) asqprtpilllrdnrtastrartpspsgvaagrprpaa (115)

Rat (78) aaqprtpilllrdnrtasarartpspsgvaagrprpaa (115)

SEQ ID NOs.: 6-8

ID

(57) Abstract: A therapeutic composition that includes an active portion of the lysyl oxidase pro-peptide in a pharmaceutically acceptable carrier substance and methods of using such a therapeutic composition are disclosed. The active agent does not have lysyl oxidase enzymatic activity. Preferably, the active polypeptide is active in inhibiting cell growth in soft agar and active in inhibiting tumor formation. In addition, the active polypeptide preferably comprises an active portion of the amino acid sequence given in SEQ ID NO.: 1 or SEQ ID NO.: 2, or conservative substitions thereof. Alternatively, the active polypeptide comprises a polypeptide comprising an active portion of an amino acid sequence selected from the group consisting of SEQ ID NOs.: 3-8, or conservative substitions thereof.







ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### **Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,

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